

REMARKS

Applicants respectfully traverse and request reconsideration.

Applicants wish to thank the Examiner for notice that claims 2-13, 22 and 23 are allowed and for the courtesies extended during the telephone conference of April 27, 2007.

Applicants also wish to thank the Examiner for the statements made in the “Response to Arguments” section attempting to address Applicants’ previous remarks. However, it appears that the claim language and Applicants’ previous remarks may have been misapprehended. Accordingly, as set forth below, the other pending claims are also in condition for allowance.

Claims 14 and 25 are objected to due to informalities. Typographical corrections have been made.

Claims 24 and 25 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants have corrected typographical errors. Accordingly, Applicants respectfully request withdrawal of the rejection.

Claims 4-17 and 24-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cheney in view of So. As a preliminary matter, claim 17 was canceled. Accordingly, Applicants will not address this claim. It is alleged that Cheney teaches storing both compressed transport stream data signals via a first bus and a memory buffer controlled by the secondary set of control signals wherein the memory buffer also comprises a frame buffer that stores uncompressed data in a different mode of operation. The office action cites column 9, line 9 – column 13, line 36 and specifically states that the “normal and scaled modes of operation” correspond to different modes of operation and apparently that compressed and uncompressed data are stored in the same frame buffer during these modes. However, Cheney does not teach a frame buffer that stores both uncompressed data and compressed data from the transport stream in different modes of operation. In fact, it appears that instead Cheney teaches a system that

employs frame buffers that store decoded video data in a full frame format or a combination of decoded full frame format and scaled decoded video for output to a display as noted, for example, in column 9, lines 26-31. Also, column 9, lines 31-54 specifically state that the encoded streams which is a coded MPEG-2 video data is “fed through memory control unit 652 as coded MPEG-2 video data to the input of video decoder 654.” (emphasis added). As such, Cheney teaches that the encoded or compressed video data goes to the video decoder 654 through the memory controller 652 and not into the frame buffer until it is decoded. Accordingly, Applicants respectfully submit that the Cheney reference does not teach what is alleged and accordingly, the claims are in condition for allowance. The “Response to Arguments” section again refers to the identical portion of Cheney cited in the previous office action, but does not refer to any specific column or line number that allegedly teaches the frame buffer that stores both compressed and uncompressed data in different modes of operation. Applicants are unable to find such teachings. In fact, it appears that the cited portion of Cheney teaches a different approach. Accordingly, Applicants respectfully submit that the rejection should be withdrawn and the claims passed to allowance.

The defendant claims add additional novel and non-obvious subject matter.

As to claim 25, the Examiner reasserted the relevant remarks made with respect to claim 14. As such, Applicants respectfully reassert the remarks made above with respect to claim 14 and as such, this claim is also in condition for allowance. In addition, Applicants respectfully note that the secondary control signal as claimed also include a start of active frame indicating the first byte of a transport stream packet, and end of action frame control signal indicating the last byte of a transport stream packet and a deactivate control signal that is asserted to indicate invalid bytes are present in the compressed transport stream. The office action cites to Newton’s

Telecom Dictionary that provides a definition of the term “packet”. However, claim 25 includes specific information provided by the secondary control signals, namely as noted in claim 5, a start of active frame control signal indicating the first part of the transport stream packet, and end of active frame control signal and so on. The office action does not address this frame based language in the cited portion and the Newton’s Telecom Dictionary does not identify any such secondary control signal derived from compressed transport stream control signals that provide such information or the use of such start of active frame control signal information as claimed. The control signals, for example, as noted in claim 25, demark frames of information based on secondary control signals from a compressed stream. In addition, both the compressed and uncompressed data is stored in the frame buffer in different modes. Accordingly, Applicants respectfully submit that the claim is in condition for allowance. If the claim is again rejected, Applicants respectfully request a showing as to column and line number as to where the specific claim language is taught.

Claims 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schindler in view of So. Claim 18 requires, among other things, a video graphics adapter having a transport stream port that receives a compressed transport stream and another transport stream and which includes a bus interface port that is coupleable to a central processing unit and further includes a graphics engine and a video output port.

The office action admits that the Schindler reference fails to teach, among other things, a video graphics adapter having a transport stream port to receive compressed transport stream and another transport stream. The office action also admits that the Schindler reference teaches a digital video broadcast signal as transmitted through the PCI bus 312. Applicants respectfully note that the claim requires, among other things, that the video graphics adapter includes both a

transport stream port that receives multiple transport streams and also includes a bus interface port coupleable to a central processing unit and further includes a graphics engine and a video output port. There does not appear to be any cite to any reference that teaches such a video graphics adapter that includes a graphics engine and multiple ports as claimed. In fact, it appears to be admitted that neither the Schindler reference nor the So reference teach such a structure. The So reference has been cited as allegedly teaching a video graphics adapter that has a transport stream port to receive the compressed transport stream and another transport stream and also includes a graphics engine and video output port as Schindler has not been cited as teaching this subject matter. The office action alleges that this language is met by the Northbridge chip 108. However, the Northbridge chip does not have a graphics engine nor does it include a video output as required by the claim and as such does not qualify as a video graphics adapter. Since the cited reference does not teach the claimed subject matter, Applicants respectfully submit that the claim is in condition for allowance.

In addition, Applicants respectfully submit that even combining the alleged teaching of the references as suggested by the office action, would not result in Applicants' claimed invention. For example, the office action states that the combination of the method of receiving video graphics data as disclosed by Schindler with the teaching of So which discloses using "a Northbridge integrated interface for multiple buses in conjunction with the frame buffer memory in a system or PCI bus" would provide advantages of reducing hardware components, simplify the system and bypass the PCI bus which would cut manufacturing costs and improve processing speed as shown by the So reference. However, Applicants respectfully submit that the combination of the references requires the addition of the Northbridge chip 108 which actually increases the cost of the system and requires an additional integrated circuit.

So also teaches away from the combination since the video graphics blocks described do not have the transport stream ports that receive compressed transport stream and another transport stream as well as a bus interface port as claimed but appears to use a conventional video graphics structure. Accordingly, this claim is also in condition for allowance.

As to claim 19, the claim requires, among other things, graphics memory operatively coupled to the graphics engine the transport stream port and the bus interface port to store at least a portion of the compressed transport stream and is coupled to store data for the graphics engine as well. The office action cites to the DRAM 514 in Schindler which in fact is a dedicated piece of RAM for the decoder as shown and as stated for example, in column 11, line 38. The DRAM 514 is not a graphics memory that stores either a compressed transport stream or data for a graphics engine nor is it coupled to a bus interface port as required by the claim. Accordingly, the claim is in condition for allowance. The office action also fails to provide any other reference and any teaching that teaches a graphics memory that stores either data for a graphics engine or stores a compressed transport stream that is coupled to a transport stream port and to a bus interface port as claimed. In fact, the reference to this So reference refers to internal memory 128 but the office action is silent as to why a combination of internal memory 128 and dedicated decoder DRAM 514 of Schindler renders the claim unpatentable. In any event, the claim structure is not taught in the cited reference. Accordingly, this claim is also in condition for allowance.

Claim 20 is also allowable as at least depending from an allowable base claim.

Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schindler in view of Malladi et al. and in further view of Datari. Claim 21 requires, among other things, storing pixel information in a frame buffer of a video graphics adapter wherein one line of frame

buffer memory is representative of one line of video image to be displayed and in the second mode of operation stores compressed transport stream data wherein one line of the frame buffer memory is representative of one transport stream packet.

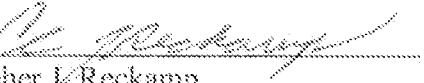
The “Response to Arguments” section indicates that Applicants’ argument attempts to argue the claim being allowable as providing another advantage which would flow naturally from following the suggestion of the prior art. However, Applicants respectfully submit that their remarks may have been misapprehended. Applicants instead are pointing out that the cited motivation statement is inapplicable to Applicants’ claimed subject matter and it is the responsibility of the Patent Office to provide in the record the motivation upon which it relies to combine selective teachings of the references. The cited portion of Schindler however, actually refers to decoded video data being placed by the controller into VRAM 518 and again does not refer to a frame buffer that stores either compressed data from a transport stream or uncompressed pixel data for display depending upon a mode of operation nor one line/one packet storage structure. The motivation used to reject the claims must be relevant to Applicants’ claimed invention. The motivation is not relevant to Applicants’ device. As such, one would not use such motivation to combine references and as such, the references are not combinable as alleged. In any event, as noted above, the references when analyzed for their actual teaching as noted above, do not teach what is alleged in the office action and as such, the claims are in condition for allowance.

The defendant claims add additional novel and non-obvious subject matter.

Applicants respectfully submit that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the

below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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